

**In The Claims:**

1. (Original) A method of operating a safety system of an automotive vehicle comprising:

determining a lateral acceleration of the vehicle;  
determining a lateral characteristic other than lateral acceleration;  
comparing the lateral acceleration and lateral characteristic to a threshold that is a function of the lateral acceleration and the lateral characteristic;  
indicating a roll condition in response to comparing; and  
controlling a safety system in response to the roll condition.

2. (Original) A method as recited in claim 1 wherein the safety system comprises a roll stability control system.

3. (Original) A method as recited in claim 1 wherein the safety system comprises an airbag.

4. (Original) A method as recited in claim 1 further comprising determining a roll angle; wherein indicating a roll condition comprises indicating a roll condition in response to comparing and the roll angle.

5. (Original) A method as recited in claim 1 further comprising determining a longitudinal speed; wherein indicating a roll condition comprises indicating a roll condition in response to comparing and the longitudinal speed.

6. (Original) A method as recited in claim 1 further comprising determining a side slip angle; wherein indicating a roll condition comprises indicating a roll condition in response to comparing and the side slip angle.

7. (Original) A method as recited in claim 1 wherein the lateral characteristic comprises lateral energy.

8. (Original) A method as recited in claim 1 wherein the lateral characteristic comprises lateral energy density.

9. (Original) A method as recited in claim 1 wherein the lateral characteristic comprises lateral velocity.

10. (Original) A method as recited in claim 1 further comprising determining a vertical acceleration, confirming the roll condition in response to the vertical acceleration.

11. (Currently Amended) A method of controlling a safety device of an automotive vehicle comprising:

determining a roll angle or rate of the vehicle;

determining a lateral acceleration;

determining a lateral characteristic other than lateral acceleration;

generating a first indication of a roll condition in response to roll angle or rate;

generating a second indication of a roll condition ~~in response to~~ by comparing lateral acceleration and the lateral characteristic other than lateral acceleration to a threshold that is a function of lateral acceleration and lateral characteristic other than lateral acceleration; and

controlling the safety device in response to the first indication and the second indication.

12. (Currently Amended) A method as recited in claim ~~12~~ 11 further comprising determining a vertical acceleration of the vehicle; safing the first indication in response to vertical acceleration.

13. (Currently Amended) A method as recited in claim ~~12~~ 11 further comprising determining a vertical acceleration of the vehicle; safing the second indication in response to vertical acceleration.

14. (Currently Amended) A method as recited in claim ~~12~~ 11 further comprising determining a side slip angle; wherein controlling the safety device comprises controlling the safety device in response to the side slip angle.

15. (Original) A method as recited in claim 14 wherein determining a side slip angle comprises determining a longitudinal speed and a lateral speed.

16. (Currently Amended) A control system for an automotive vehicle comprising:

a lateral acceleration sensor generating a lateral acceleration signal;  
a longitudinal speed sensor generating a longitudinal speed signal;  
a lateral speed sensor generating a lateral speed signal;  
a roll angle sensor generating a roll angle signal; and  
a controller coupled to the lateral acceleration sensor, the longitudinal speed sensor, the lateral acceleration sensor, and the roll angle sensor, said controller generating a side slip angle in response to the lateral speed and the longitudinal speed, said controller generating a lateral characteristic other than lateral acceleration said controller indicating a roll condition by comparing the lateral acceleration signal and the lateral characteristic to a threshold and in response to side slip angle and roll angle, said threshold being a function of lateral acceleration and lateral characteristic other than lateral acceleration.

17. (Original) A control system as recited in claim 16 wherein said roll angle sensor comprises a roll rate sensor from which roll angle is derived.

18. (Original) A control system as recited in claim 16 wherein the safety system comprises a roll stability control system.

19. (Original) A control system as recited in claim 16 wherein the safety system comprises an airbag.

20. (Original) A control system as recited in claim 16 further comprising a vertical acceleration sensor generating a vertical acceleration signal coupled to the controller, said controller confirming the roll condition in response to the vertical acceleration sensor.